WHAT IS CLAIMED IS:

1. An electroplating process, comprising:

placing a substrate in an enclosure being substantially devoid of unwanted contaminants;

forming a material layer over said substrate within said enclosure, said enclosure still being substantially devoid of said unwanted contaminants; and

forming a thin layer of oxide over said material layer within said enclosure, said enclosure still being substantially devoid of said unwanted contaminants during said forming said thin layer of oxide.

2. The process as recited in Claim 1 further including removing said substrate from said enclosure after forming said thin layer of oxide over said material layer, and placing said substrate in an electroplating solution.

3. The process as recited in Claim 2 wherein said electroplating solution is a copper electroplating solution.

4. The process as recited in Claim 1 further including forming a seed layer over said substrate within said enclosure prior to said forming said material layer, said enclosure still

being substantially devoid of said unwanted contaminants.

5. The process as recited in Claim 4 wherein said enclosure includes at least 3 compartments, and wherein said seed layer is formed in a first compartment, said material layer is formed in a second compartment, and said thin layer of oxide is formed in a third compartment.

6. The process as recited in Claim 4 wherein said enclosure includes at least 2 compartments, and wherein said seed layer and said material layer are formed in a first compartment and said thin layer of oxide is formed in a second compartment.

7. The process as recited in Claim 4 wherein said seed layer is a copper seed layer.

8. The process as recited in Claim 4 wherein forming said seed layer over said substrate includes forming said seed layer over said substrate at a first low pressure ranging from about 1.5 militorr to about 50 militorr.

9. The process as recited in Claim 8 wherein forming said material layer over said substrate includes forming said material layer over said substrate at a second low pressure ranging from

about 1.5 militorr to about 50 militorr.

10. The process as recited in Claim 1 wherein forming said thin layer of oxide over said material layer within said enclosure includes introducing pure oxygen into said enclosure thereby forming said thin layer of oxide.

11. The process as recited in Claim 1 wherein forming said thin layer of oxide over said material layer within said enclosure includes forming said thin layer of oxide having a thickness ranging from about 0.5 nm to about 10 nm.

12. The process as recited in Claim 1 wherein forming said thin layer of oxide over said material layer within said enclosure includes forming a thin layer of oxide at a temperature ranging from about -10°C to about 150°C.

13. The process as recited in Claim 1 wherein placing said substrate in said enclosure being substantially devoid of unwanted contaminants includes placing said substrate in said enclosure containing said unwanted contaminants and removing said unwanted contaminants from said enclosure.

14. The process as recited in Claim 13 wherein said unwanted

contaminants are selected from the group consisting of:

moisture;

volatile organics; and

ionic radicals.

15. A method for manufacturing an integrated circuit, comprising:

providing a semiconductor substrate having transistor devices located thereover;

forming a dielectric layer over said transistor devices; and

forming an interconnect in said dielectric layer, including;

creating an opening in said dielectric layer;

placing said dielectric layer in an enclosure being substantially devoid of unwanted contaminants;

forming a material layer in said opening within said enclosure, said enclosure still being substantially devoid of said unwanted contaminants; and

forming a thin layer of oxide over said material layer within said enclosure, said enclosure still being substantially devoid of said unwanted contaminants during said forming said thin layer of oxide; and

removing said substrate having said thin layer of oxide from said enclosure and placing said substrate in an electroplating solution.

16. The method as recited in Claim 15 further including forming a seed layer in said opening within said enclosure prior to said forming said material layer, said enclosure still being substantially devoid of said unwanted contaminants.

17. The method as recited in Claim 16 wherein said enclosure includes at least 3 compartments, and wherein said seed layer is formed in a first compartment, said material layer is formed in a second compartment, and said thin layer of oxide is formed in a third compartment.

18. The method as recited in Claim 16 wherein said enclosure includes at least 2 compartments, and wherein said seed layer and said material layer are formed in a first compartment and said thin layer of oxide is formed in a second compartment.

19. The method as recited in Claim 15 wherein forming said thin layer of oxide over said material layer within said enclosure includes introducing pure oxygen into said enclosure thereby forming said thin layer of oxide.

20. The method as recited in Claim 15 wherein placing said substrate in said enclosure being substantially devoid of unwanted contaminants includes placing said substrate in said enclosure containing said unwanted contaminants and removing said unwanted contaminants from said enclosure.